(xii) An application for type acceptance of an AM broadcast stereophonic exciter-generator intended for interfacing with existing type-accepted or notified transmitters must include measurements made on a complete stereophonic transmitter. The instruction book must include complete specifications and circuit requirements for interconnecting with existing transmitters. The instruction book must also provide a full description of the equipment and measurement procedures to monitor modulation and to verify that the combination of stereo exciter-generator and transmitter meet the emission limitations of section 73.44.

(e) A single application may be filed for a composite system that incorporates devices subject to certification under multiple rule parts, however, the appropriate fee must be included for each device. Separate applications must be filed if different FCC Identifiers will be used for each device.

38. Section 2.1041 is deleted.

39. Section 2.1043 is amended to read as follows:

Section 2.1043 *Changes in certificated equipment.*

(a) Changes to the basic frequency determining and stabilizing circuitry (including clock or data rates), frequency multiplication stages, basic modulator circuit or maximum power or field strength ratings shall not be performed without application for and authorization of a new grant of certification. Variations in electrical or mechanical construction, other than these indicated items, are permitted provided the variations either do not affect the characteristics required to be reported to the Commission or the variations are made in compliance with the other provisions of this section.

(b) Two classes of permissive changes may be made in certificated equipment without requiring a new application for and grant of certification. Neither class of change shall result in a change in identification.

(1) A Class I permissive change includes those modifications in the equipment which do not degrade the characteristics reported by the manufacturer and accepted by the Commission when certification is granted. No filing with the Commission is required for a Class I permissive change.

(2) A Class II permissive change includes those modifications which degrade the performance characteristics as reported to the Commission at the time of the initial certification. Such degraded performance must still meet the minimum requirements of the applicable rules. When a Class II permissive change is made by the grantee, he shall supply the Commission with complete information and the results of tests of the characteristics

affected by such change. The modified equipment shall not be marketed under the existing grant of certification prior to acknowledgement by the Commission that the change is acceptable.

(3) Permissive changes, as detailed above, shall be made only by the holder of the grant of certification. Changes by any party other than the grantee require a new application for and grant of certification.

(c) A grantee desiring to make a change other than a permissive change shall file an application on FCC Form 731 accompanied by the required fees. The grantee shall attach a description of the change(s) to be made and a statement indicating whether the change(s) will be made in all units (including previous production) or will be made only in those units produced after the change is authorized.

(d) A modification which results in a change in the identification of a device with or without change in circuitry requires a new application for, and grant of certification. If the changes affect the characteristics required to be reported, a complete application shall be filed. If the characteristics required to be reported are not changed the abbreviated procedure of section 2.933 may be used.

(e) Equipment that has been certificated or formerly type accepted for use in the Amateur Radio Service pursuant to the requirements of Part 97 of this chapter may be modified without regard to the conditions specified in Paragraph (b) of this section, provided the following conditions are met:

(1) Any person performing such modifications on equipment used under Part 97 of this chapter must possess a valid amateur radio operator license of the class required for the use of the equipment being modified.

(2) Modifications made pursuant to this paragraph are limited to equipment used at licensed amateur radio stations.

(3) Modifications specified or performed by equipment manufacturers or suppliers must be in accordance with the requirements set forth in Paragraph (b) of this section.

(4) Modifications specified or performed by licensees in the Amateur Radio Service on equipment other than that at specific licensed amateur radio stations must be in accordance with the requirements set forth in Paragraph (b) of this section.

(5) The station licensee shall be responsible for insuring that modified equipment used at his station will comply with the applicable technical standards in Part 97 of this chapter.

(f) for equipment other than that operating under Parts 15 or 18, when a Class II permissive change is made by other than the grantee of type acceptance, the information and

data specified in paragraph (b)(2) of this section shall be supplied by the person making the change. The modified equipment shall not be operated under an authorization of the Commission prior to acknowledgement by the Commission that the change is acceptable.

(g) The interconnection of a certificated or formerly type accepted AM broadcast stereophonic exciter-generator with a certificated or formerly type accepted AM broadcast transmitter in accordance with the manufacturer's instructions and upon completion of measurements showing that the modified transmitter meets the emission limitation requirements of section 73.44 is defined as a Class I permissive change for compliance with this section.

(h) The interconnection of a multiplexing exciter with a certificated or formerly type accepted AM broadcast transmitter in accordance with the manufacturer's instructions without electrical or mechanical modification of the transmitter circuits and completion of equipment performance measurements showing the transmitter meets the minimum performance requirements applicable thereto is defined as a Class I permissive change for compliance with this section.

(i) The addition of TV broadcast subcarrier generators to a certificated or formerly type accepted TV broadcast transmitter or the addition of FM broadcast subcarrier generators to a type accepted FM broadcast transmitter, provided the transmitter exciter is designed for subcarrier operation without mechanical or electrical alterations to the exciter or other transmitter circuits.

(j) The addition of TV broadcast stereophonic generators to a certificated or formerly type accepted TV broadcast transmitter or the addition of FM broadcast stereophonic generators to a certificated or formerly type accepted FM broadcast transmitter, provided the transmitter exciter is designed for stereophonic sound operation without mechanical or electrical alterations to the exciter or other transmitter circuits.

(k) The addition of subscription TV encoding equipment for which the FCC has granted advance approval under the provisions of Section 2.1400 in Subpart M and Section 73.644(c) of Part 73 to a certificated or formerly type accepted transmitter is considered a Class I permissive change.

(l) Notwithstanding the provisions of this section, broadcast licensees or permittees are permitted to modify certificated or formerly type accepted equipment pursuant to Section 73.1690 of the FCC's Rules.

40. A new Section 2.1080 is added to read as follows:

Section 2.1080 *Measurement Procedures*

The measurement procedures are specified in the rules governing the particular device for which certification is requested. For equipment operating in the authorized radio services, measurements are required as specified in §§ 2.1081, 2.1083, 2.1091, 2.1093, 2.1097, and 2.1099.

41. A new Section 2.1105 is added to read as follows:

Section 2.1105 *Equipment for use in the Amateur Radio Service.*

(a) The general provisions of §§ 2.1081, 2.1083, 2.1091, 2.1093, 2.1097, 2.1099, and 2.925 shall apply to applications for, and grants of, certification for equipment operated under the requirements of Part 97 of this chapter, the Amateur Radio Service.

(b) When performing the tests specified in Sections 2.1091 and 2.1093 of this part, the center of the transmitted bandwidth shall be within the operating frequency band by an amount equal to 50 percent of the bandwidth utilized for the tests. In addition, said tests shall be made on at least one frequency in each of the bands within which the equipment is capable of tuning.

(c) Any supplier of an external radio frequency power amplifier kit as defined by § 97.3(a)(17) of this chapter shall comply with the following requirements:

(1) Assembly of one unit of a specific type shall be made in exact accordance with the instructions being supplied with the product being marketed. If all of the necessary components are not normally furnished with the kit, assembly shall be made using the recommended components.

(2) The measurement data required for type acceptance shall be obtained for this unit and submitted with the type acceptance application. Unless otherwise requested, it is not necessary to submit this unit with the application.

(3) A copy of the exact instructions which will be provided for assembly of the equipment shall be provided in addition to other material required by section 2.1083 of this part.

(4) The identification label required by § 2.925 of this part shall be permanently affixed to the assembled unit and shall be of sufficient size so as to be easily read. The following information shall be shown on the label:

(Name of Grantee of Type Acceptance)

FCC ID: (The number assigned to the equipment
by the grantor)

This amplifier can be expected to comply with part 97 of the FCC Regulations when assembled and aligned in strict accordance with the instruction manual using components with the kit or an exact equivalent thereof.

(Title and signature of responsible representative of Grantee)

Statement of Compliance

I state that I have constructed this equipment in accordance with the instruction manual and using the parts furnished by the supplier of this kit.

(Signature)
(Date)

(Amateur call sign) (Class of license)

(Expiration date of license)

To be signed by the person responsible for proper assembly of kit.)

(5) If requested, an unassembled unit shall be provided for assembly and test by the Commission. Shipping charges to and from the Commission's Laboratory shall be borne by the applicant.

(d) Certification of external radio frequency power amplifiers and amplifier kits may be denied when denial serves the public interest, convenience and necessity by preventing the use of these amplifiers in services other than the Amateur Radio Service. Other uses of these amplifiers, such as in the Citizens Band Radio Service, are prohibited (§ 95.411 of this chapter). Examples of features which may result in the denial of certification are contained in § 97.317 of this chapter.

APPENDIX C

EQUIPMENT CLASSES AND EQUIPMENT AUTHORIZATION PROCEDURES

The procedures shown below as applicable to the particular classes of equipment are those required at the time of publication of this Bulletin.

Key to authorization procedures: £ Certification ■ Notification ¤ Type Acceptance
§ Verification Θ Declaration of Conformity
Δ Certification or Declaration of Conformity

LICENSED TRANSMITTING EQUIPMENT

PART 5: Experimental Radio Service
- ■ Wildlife tracking (40.66-40.70 MHz and 216-220 MHz)
- ■ Ocean buoy (40.66-40.70 MHz and 216-220 MHz)

PART 11: Emergency Alert System (EAS) Subpart B
- £ Emergency alert systems (EAS) Decoders
- £ Emergency alert systems (EAS) Encoders

PART 21: Domestic Public Fixed
- ■ Point-to-point microwave (Subpart I)
- ¤ All other transmitters, except those under developmental authorization

PART 22: Domestic Mobile
- ¤ Cellular (Subpart K)
- ¤ All other transmitters except those under developmental authorization

PART 24: Personal Communications Services (PCS)
- ¤ Narrowband PCS (Subpart D)
- ¤ Broadband PCS (Subpart E)

PART 73: Broadcast
- ■ Standard broadcast (AM transmitters)
- ¤ AM stereo exciter-generators
- ■ FM transmitters
- ■ Television transmitters
- ■ Monitors, antenna phase
- ¤ Emergency broadcast systems (EBS) Encoders
- £ Emergency broadcast systems (EBS) Decoders

PART 74: Auxiliary Broadcast
- ¤ Remote pickup (Subpart D)
- ■ Aural STL (Subpart E)
- ■ Aural intercity relay (Subpart E)
- ■ Aural STL booster (Subpart E)
- ■ Aural intercity relay booster (Subpart E)
- ¤ Others, except TV pickup under 250 mW (Subpart F)
- ■ TV STL (Subpart F)
- ■ TV intercity relay (Subpart F)
- ■ TV translator relay (Subpart F)
- ■ TV microwave booster (Subpart F)
- ¤ Low power TV (Subpart G)
- ¤ TV translator (Subpart G)
- ¤ Low power auxiliary (Subpart H)
- ¤ Instructional TV, fixed (ITFS)(Subpart I)
- ¤ ITFS response (Subpart I)
- ¤ FM broadcast translator (Subpart L)
- ¤ FM broadcast booster (Subpart L)

PART 78: Cable Television Relay
- ■ Cable television relay fixed
- ¤ Cable television relay mobile pickup \1

PART 80: Maritime
- ¤ Radiotelephone
- ¤ Radiotelegraph
- ¤ EPIRB
- ¤ Radar
- § Ship earth station \2
- ¤ Radiotelephone alarm signal generators
- ¤ Radiotelephone distress watch receivers
- ¤ Radiotelegraph alarm signal keyers
- ¤ Radiotelegraph auto alarm receivers

Global Maritime Distress and Safety (GMDSS). Subpart W
- ¤ All Equipment (except INMARSAT)
- ■ INMARSAT

PART 87: Aviation
- ¤ All transmitters, except as provided in Section 87.145(d)
- ■ 406 MHz Emergency Locator Transmitter

Key to authorization procedures: £ Certification ■ Notification ¤ Type Acceptance § Verification
Δ Certification or Declaration of Conformity Θ Declaration of Conformity

PART 90: Private Land Mobile
- ¤ Location & Monitoring Service (Subpart M)
- ¤ All other fixed transmitters, except as provided in Section 90.203(b)

PART 95: Personal Radio Services
- ¤ General mobile
- ¤ Radio control 27 MHz \4
- ¤ Radio control 72 MHz
- ¤ Citizen band (CB)
- £ Family Radio Service
- ¤ Low Power Radio Service

Interactive Video Display Services (IVDS), Subpart F
- ¤ CTS and RTU transmitters

PART 97: Amateur Radio Service
- ¤ External RF power amplifiers below 144 MHz, except as provided in Section 2.815 and Section 97.75

PART 101: Fixed Microwave Services
- ¤ All fixed transmitters, except those under developmental authorization \5

PART 15: NON-LICENSED EQUIPMENT

UNINTENTIONAL RADIATORS (SUBPART B)
- § TV broadcast receivers \6
- § FM Broadcast receivers
- £ CB receivers
- £ Scanning Receivers \7
- £ Superregenerative receivers
- ■ All other Part 15 receivers \11
- £ TV interface devices \14
- ■ Cable system terminal devices \13
- Δ Class B personal computers & peripherals as defined in Sec. 15.5(s) & 15.5(r) \9, \10
- Δ CPU boards & power supplies used with Class B personal computers \9, \10
- Θ Class B personal computers assembled using certified CPU boards or power supplies \9
- § Class B external switching power supplies not used with personal computers \9
- § Other Class B digital devices & peripherals \9
- § Class A digital devices and peripherals \9
- § Stand-alone cable input selector switch
- § External switching power supplies
- § All other Part 15 devices

INTENTIONAL RADIATORS SUBPART C
- £ Auditory assistance transmitters
- £ Cordless telephones (TX section) \8, \12
- £ Field disturbance sensors
- £ Spread spectrum transmitters
- £ Telemetry transmitters
- £ Unlicensed PCS Devices (Subpart D)
- £ Unlicensed NII Devices (Subpart E)
- £ Wireless microphones
- £ Millimeter Wave transmitters

PART 18: INDUSTRIAL, SCIENTIFIC AND MEDICAL (ISM) EQUIPMENT
- £ All ISM devices for consumer use, except ultrasonic devices generating less than 500 watts and operating below 90 kHz
- § Ultrasonic devices generating less than 500 watts and operating below 90 kHz
- § All other ISM devices, except those exempt under Section 18.121

NOTES TO TABLE

1. No equipment authorization is required for transmitters with output power 250 mW or less, used in the Cable Television Relay Service (CARS) pickup stations.

2. Applies to ship earth station transmitters in the INMARSAT system. See Section 80.203.

3. Citizens band and radio control transmitters are not required to be operated under a radio station license. See Part 95.

4. No equipment authorization is required when transmitter is crystal controlled and meets the technical requirements in Part 95.

5. Equipment authorization is not required for portable transmitters operating below 250 mW.

6. Television broadcast receivers which include an "RGB" (red-green-blue) terminal to permit use of

the picture tube of the receiver as a display device for personal computer peripherals must also be certified as personal computer peripherals. See Note 10 also.

7. The definition of "scanning receiver" for this purpose is given in Section 15.3(v) as follows: "...a receiver that automatically switches among four (4) or more frequencies in the range of 30 to 960 MHz and which is capable of stopping at and receiving a radio signal detected on a frequency. Receivers designed solely for the reception of broadcast signals under Part 73, or for operation as part of a licensed station, are not included in this definition.

   Pursuant to Section 15.121 of the Rules, scanning receivers that are capable of operating (tuning), or being readily altered by the user to operate, within the frequency band allocated to the Domestic Public Cellular Radio Telecommunications Service in Part 22 (cellular telephone bands), or capable of converting digital cellular transmissions to analog voice audio are not eligible for equipment authorization. Scanning receivers that do not comply with the provisions of Section 15.121 may not be manufactured or imported on and after April 26, 1994.

8. The base station of cordless telephones stations also require registration under Part 68 of the Rules.

9. Computer peripherals interfacing with the telephone network also require registration under Part 68 of the Rules.

10. Class B personal computers and peripherals, CPU boards and power supplies used with Class B personal computers may be authorized under the Certification procedure, which requires the submission of a formal application, FCC Form 731, fees and supporting documentation, or the Declaration of Conformity (DoC) procedure. No filing with the FCC is required for digital devices authorized under the DoC procedure.

11. Multiband receivers will generally fall under the Notification procedure. Exceptions are as follows:
    (a) A multiband receiver which includes a CB band is subject to certification.
    (b) An AM/FM/TV sound-only receiver is subject only to verification.

12. The receiver section of transceivers, the transmitter portion of which is subject to type acceptance, certification or notification, is subject to verification. See Section 15.101(b) of the Rules.

13. See Section 15.3(e) for the definition of Cable System Terminal Devices (CSTDs).

14. See Section 15.3(y) for the definition of TV interface devices and Section 15.25 for information pertaining to kits.